

Welcome to Utah

Bryce Bird

Department of Environmental Quality

Division of Air Quality

bbird@utah.gov

801-536-4000

Office of Tourism Message

<http://www.youtube.com/watch?v=QlKOcyf915M>

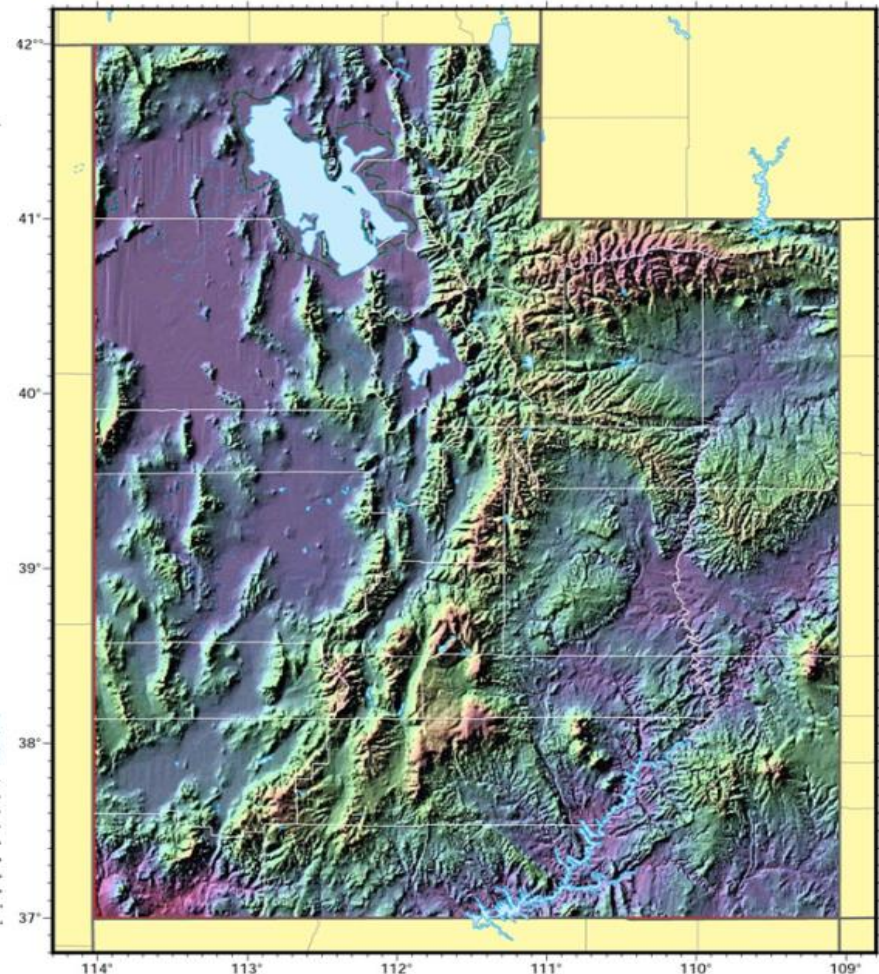
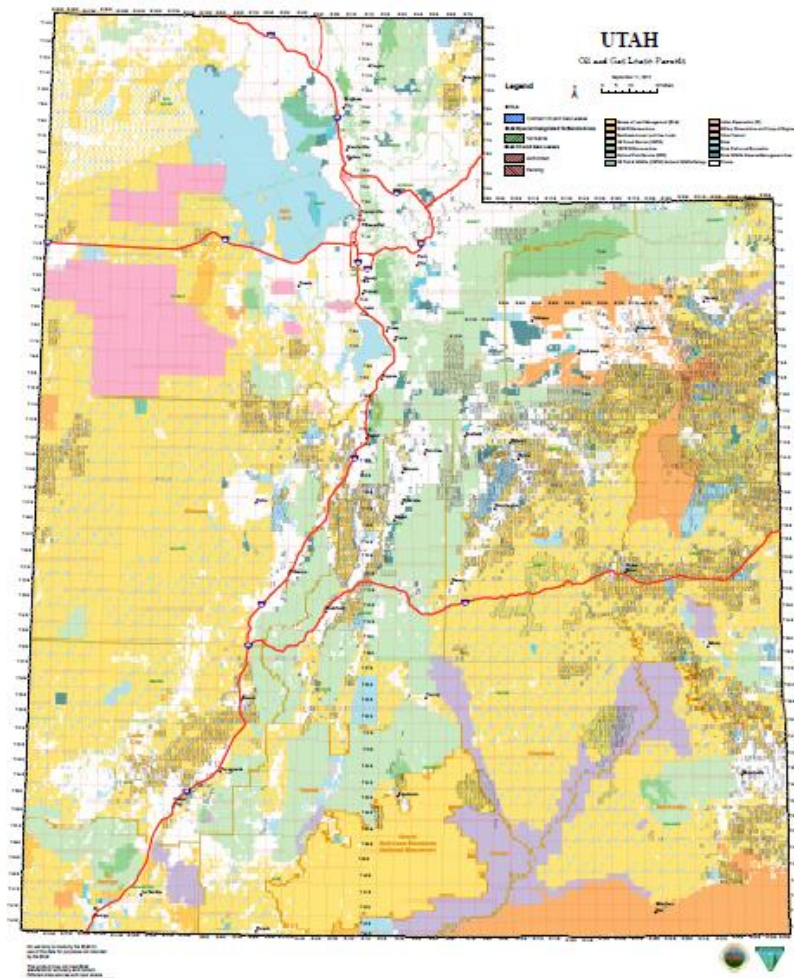
Persistent Cold-Pool Inversions



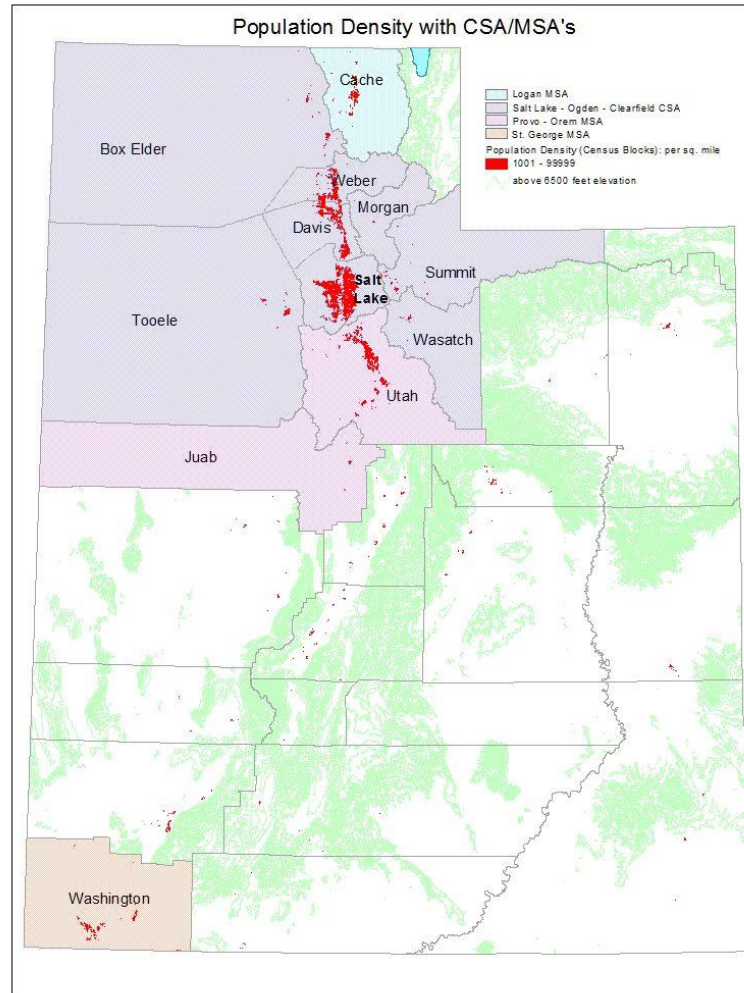
Utah experiences good air quality 95% of the time, on about 5% of days on average we exceed current federal health standards



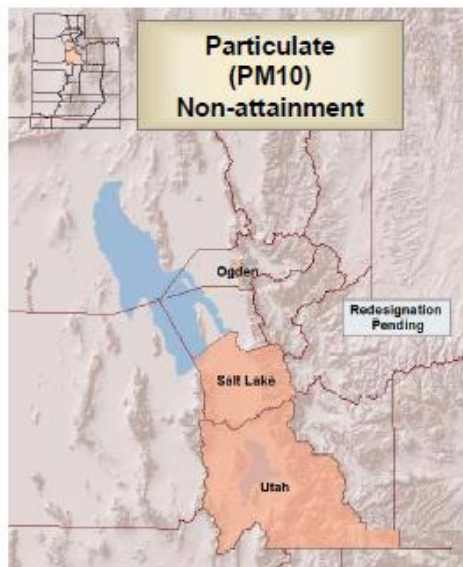
Land Ownership and Topography



Concentrated Population Centers



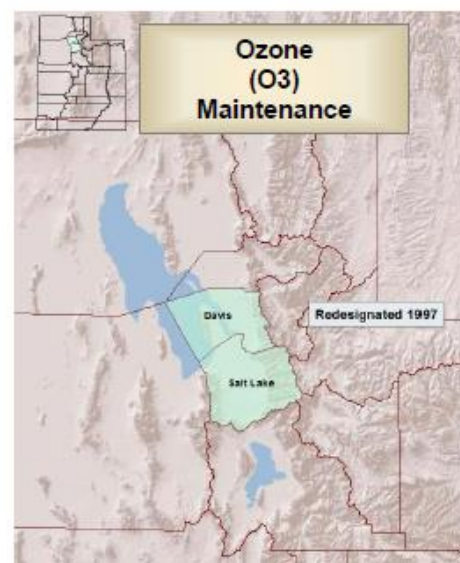
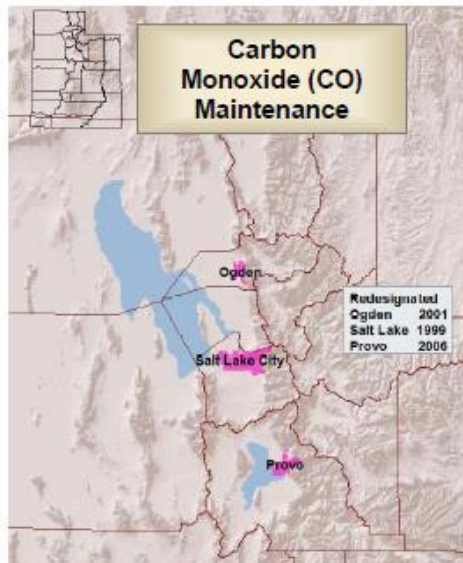
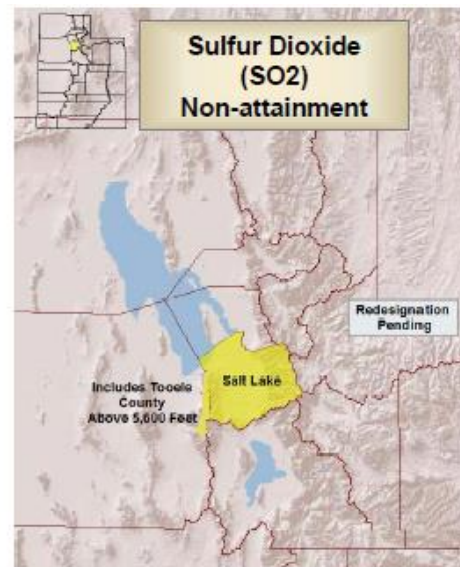
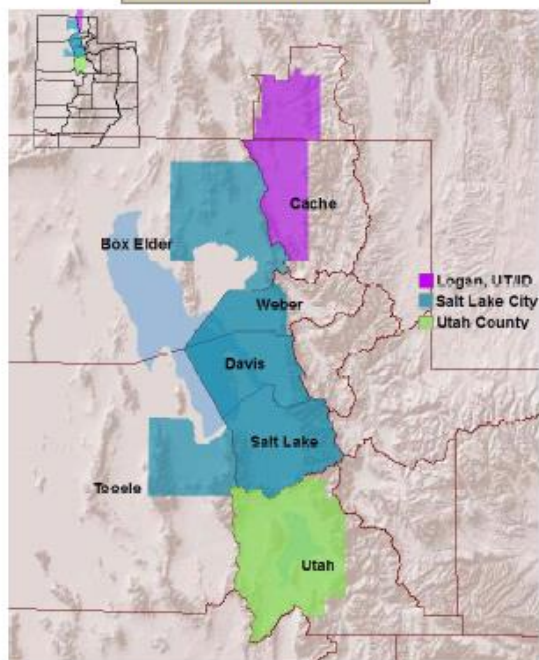
Non-attainment and Maintenance Areas



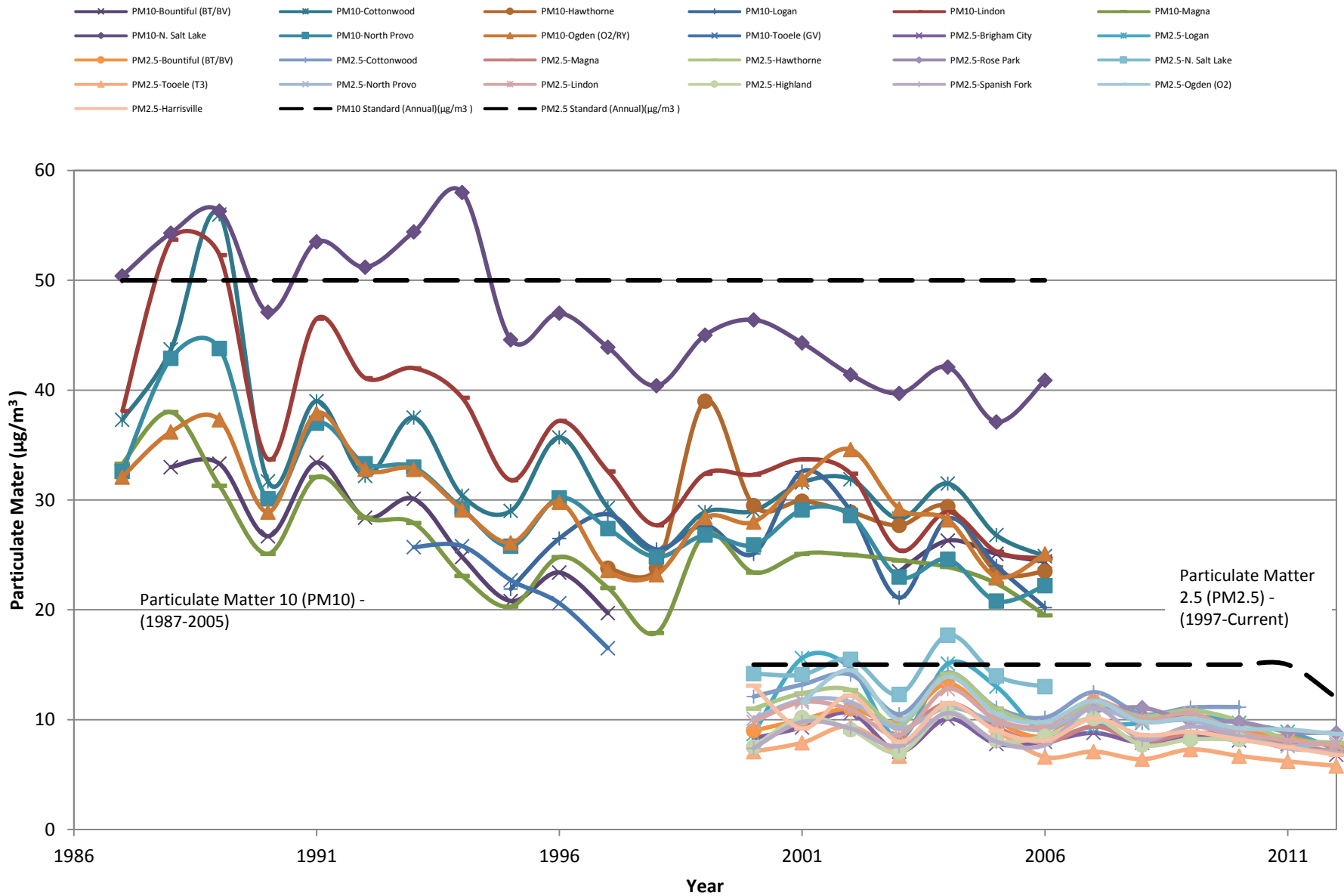
State of Utah National Ambient Air Quality Standards

**Areas of
Non-attainment and Maintenance**
(Updated March 2010)

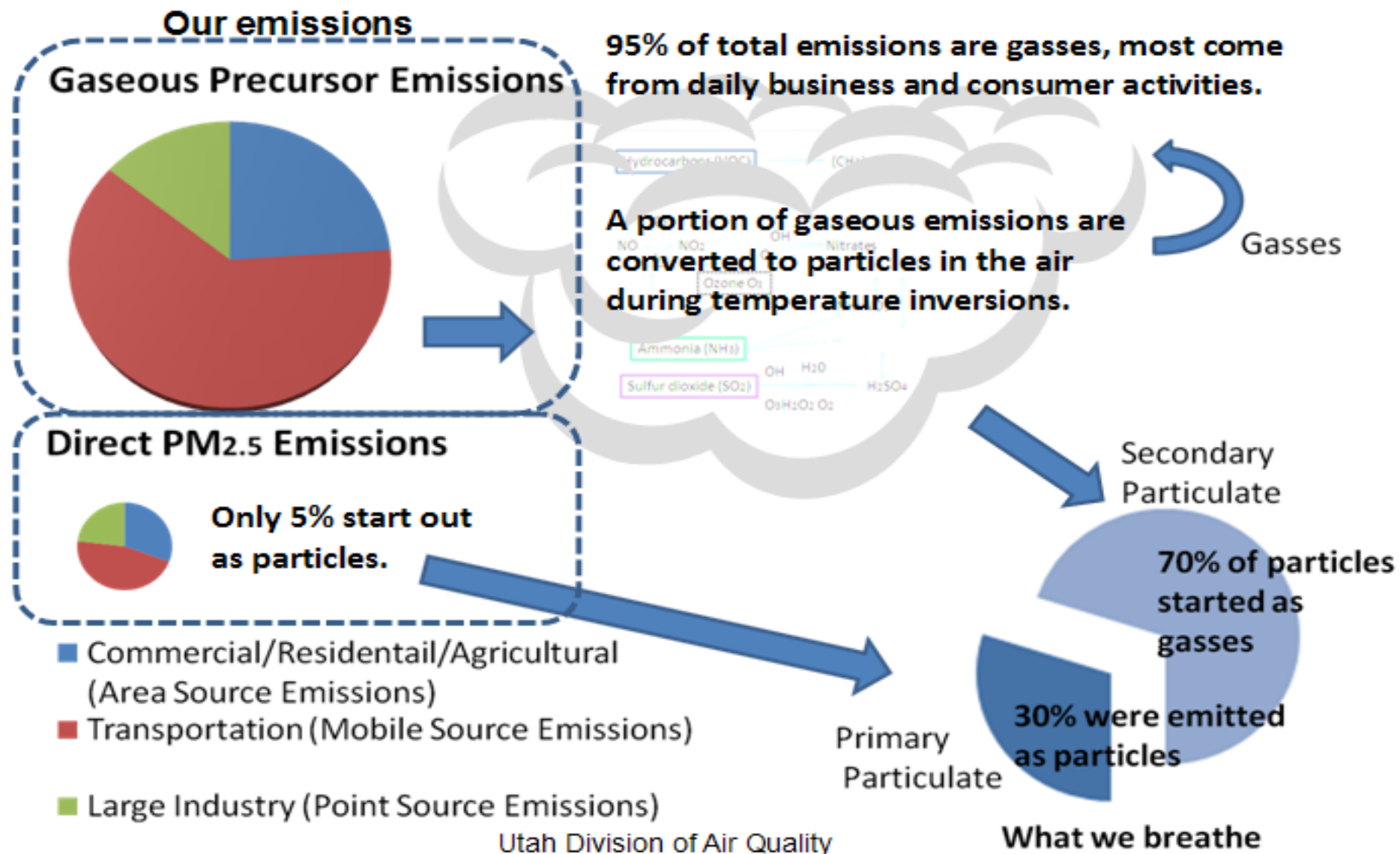
**Fine Particulate (PM2.5)
Non-attainment**



Particulate Matter (PM) Standards - Annual



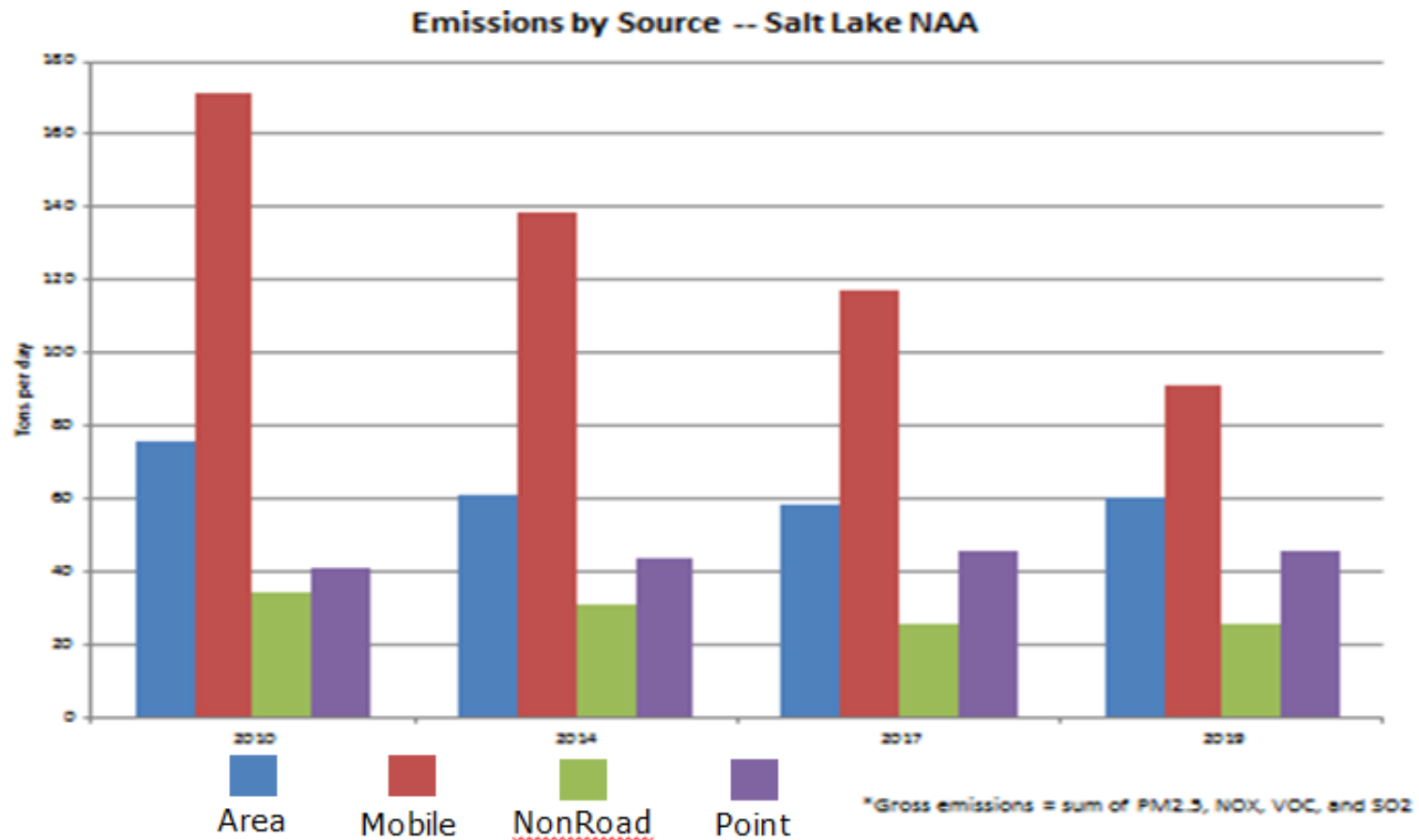
Winter Particulate (PM_{2.5}) Formation



Emission Trends by Source Category

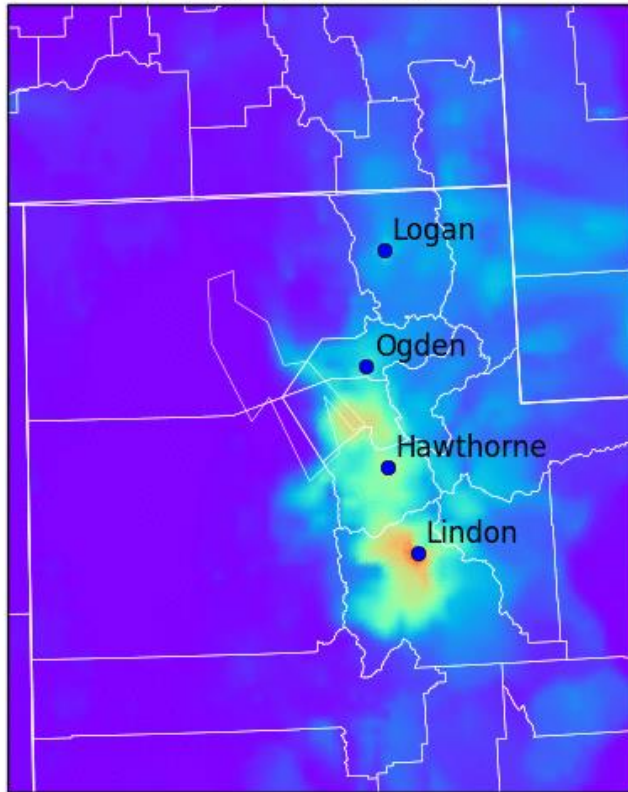
Through the SIP Planning Window

2019 daily emissions are
99.7 TPD lower than 2010



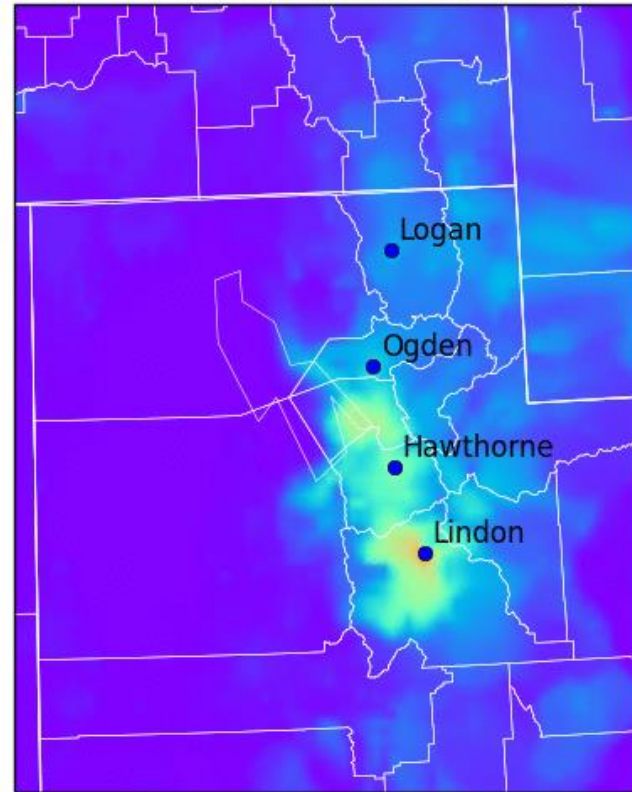
2019

PM2.5 (no controls)



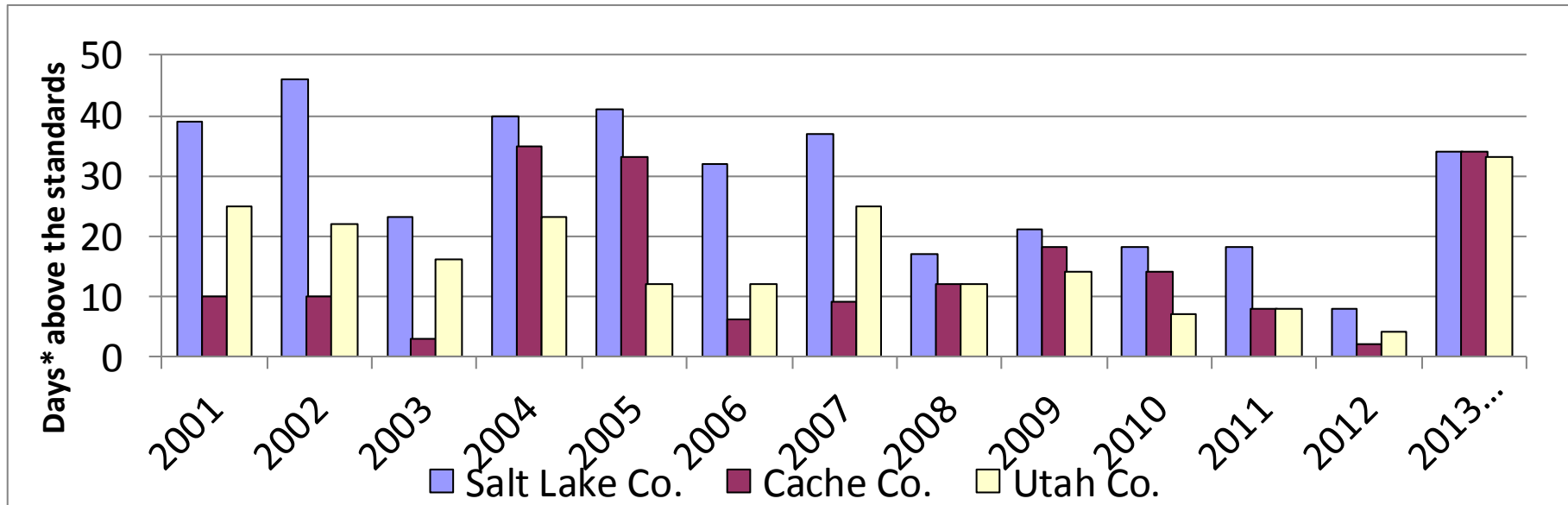
Hour: 1

PM2.5 (controls)



Hour: 1

Number of Days That Are and Those That Would Have Been Above the Current Federal Standards Salt Lake, Cache, and Utah County Areas



* Days with monitored values above the level of the **current** National Ambient Air Quality Standards combined for PM2.5 and ozone (PM2.5 standard revised in 2006, ozone standard revised in 2008)

** 2013 includes values that have not completed Quality Assurance

Background Ozone

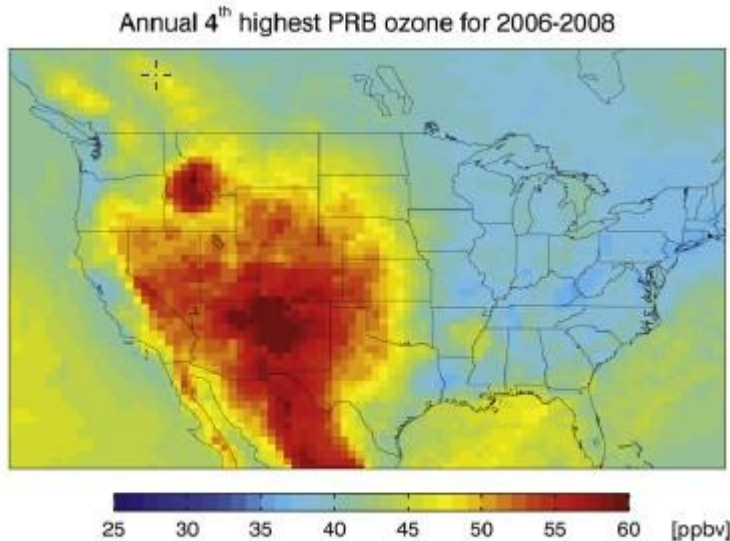
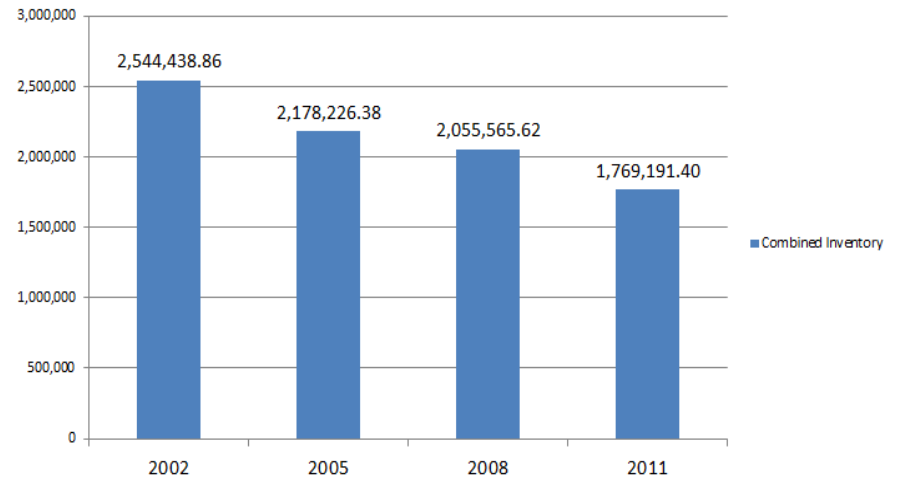


Fig. 7. Annual 4th-highest value of North American background ozone (PRB) calculated in GEOS-Chem as daily 8-h max and averaged for 2006–2008.

Zhang et al., 2011

Statewide Emissions



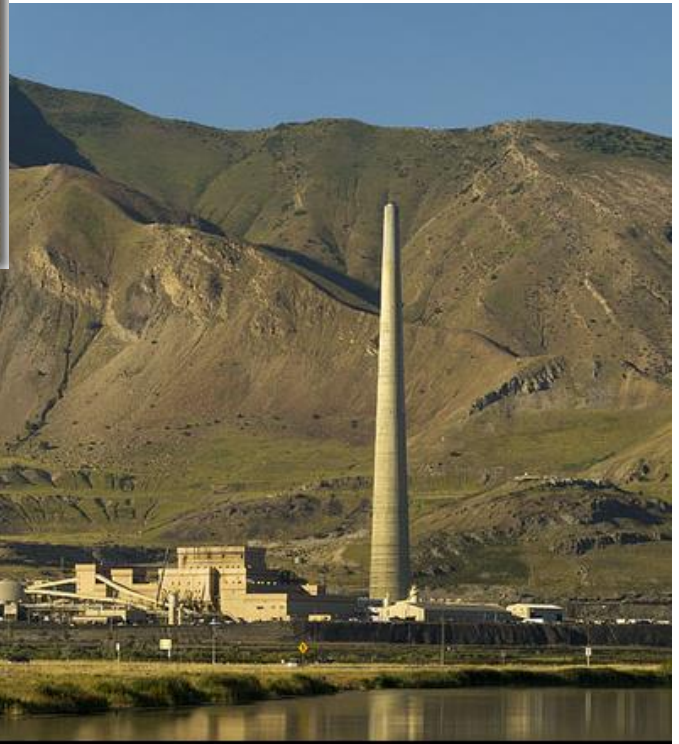
http://www.airquality.utah.gov/Planning/Emission-Inventory/Available_inventory.htm

Average Ozone April-September 1992-2012

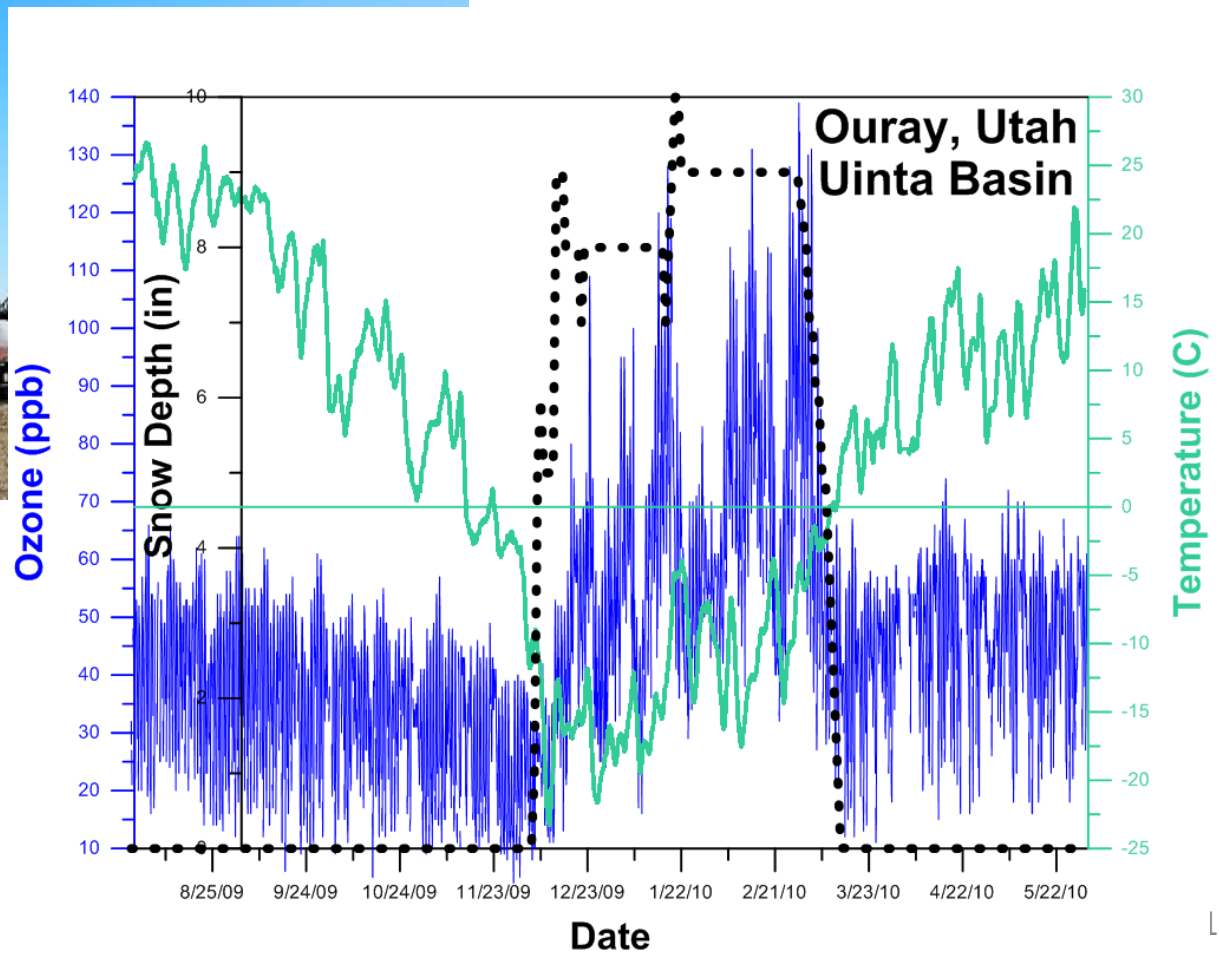
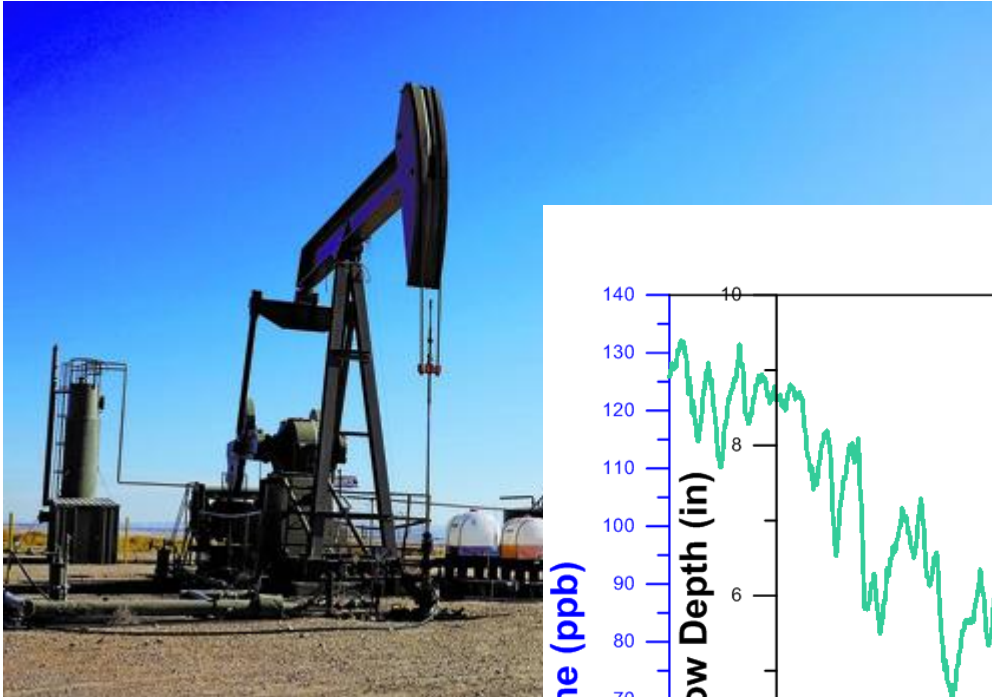


Uta





Uinta Basin Winter Ozone



Source: Russ Schnell,
Director, Observatory
Operations,
NOAA/CMDL